T	hickness	Depth	
Stratigraphic unit and material	(feet)		
12.10.26.242 Homestake-Sapin Partners (co	ntinued)		
TRIASSIC SYSTEM (continued)			
Chinle formation (continued)	2.2.6	005	
Clay and shale, varicolored, and sandstone .		835	
Shale, gray and brown		840	
Shale, purple and gray		845	
stone		850	
Clay, light-red, and gray sandstone		855	
Shale, gray, and sandstone		860	
Shale, red and gray		880	
Shale, gray, and sandstone		890	
Shale, purple and gray, and sandstone		895	
Sandstone and gray shale		900	
Shale, purple and red, and sandstone		935	
Shale, gray, and sandstone		960	
Shale, gray and red, and boulders		970	
Shale, purple, red, and gray, and sandstone	5	975	
PERMIAN SYSTEM:	-		
San Andres limestone:	*5,		
	5	980	
San Andres limestone:	ners	3, 223	
San Andres limestone: Lost circulation	ners	3, 223	
San Andres limestone: Lost circulation	ners	980 D201	
San Andres limestone: Lost circulation	ners # 2	3.22	
San Andres limestone: Lost circulation	ners # 2	Deep	
San Andres limestone: Lost circulation	ners # Z d;	3.22	
San Andres limestone: Lost circulation	ners # Z d; d; 1- 10	De 0/	
San Andres limestone: Lost circulation	ners # Z d; d; 1- 10	D2010	
San Andres limestone: Lost circulation	d; i- 10 d; 20	D2010	
San Andres limestone: Lost circulation	d; 1- 10 1; 20	De 0/	
San Andres limestone: Lost circulation	d; i; i- 10 d; 20	De 2/2 10 30 40	
San Andres limestone: Lost circulation	d; i; i- 10 d; 20	D2010	
San Andres limestone: Lost circulation	d; i; i- 10 d; 20	De 2/2 10 30 40	
San Andres limestone: Lost circulation	d; i; i- 10 d; 20	De 2/2 10 30 40	
San Andres limestone: Lost circulation	d; i- 10 d; 20 10	De 2/2 10 30 40 50	
San Andres limestone: Lost circulation	d; i; i- 10 d; 20 10	De 2/2 10 30 40	
San Andres limestone: Lost circulation	d; i; i- 10 d; 20 10	De 2/2 10 30 40 50	
San Andres limestone: Lost circulation	d; 1- 10 d; 1- 10 d- 1- 10	De 2/2 10 30 40 50	
San Andres limestone: Lost circulation 12.10.26.322a Homestake-New Mexico Partr QUATERNARY SYSTEM: Valley fill: Sand, grayish-orange, fine to coarse, rounded chiefly frosted, quartz grains; some grayish orange clay Sand, grayish-orange, fine to coarse, rounded chiefly frosted quartz Sand, light-brown, fine to coarse, rounded; light-brown, frosted quartz Sand, light-brown, fine to very coarse, rounded to subrounded; chiefly quartz Sand, light-brown, fine to very coarse, 90 percent rounded to angular quartz grains; less than 10 percent light-olive-gray limestone fragments Sand, grayish-orange, fine to very coarse, 30 percent subrounded to angular quartz; some medium to very coarse rock fragments; obsid-	d; i- 10 d; 20 10	D2010 10 30 40 50	
San Andres limestone: Lost circulation 12.10.26.322a Homestake-New Mexico Partr QUATERNARY SYSTEM: Valley fill: Sand, grayish-orange, fine to coarse, rounded chiefly frosted, quartz grains; some grayish orange clay Sand, grayish-orange, fine to coarse, rounded chiefly frosted quartz Sand, light-brown, fine to coarse, rounded; light-brown, frosted quartz Sand, light-brown, fine to very coarse, rounded to subrounded; chiefly quartz Sand, light-brown, fine to very coarse, 90 percent rounded to angular quartz grains; less than 10 percent light-olive-gray limestone fragments Sand, grayish-orange, fine to very coarse, 30 percent subrounded to angular quartz; some medium to very coarse rock fragments; obsidian, and fossil fragments	d; i- 10 d; 20 10	De 9/2 10 30 40 50	
Lost circulation 12.10.26.322a Homestake-New Mexico Partr QUATERNARY SYSTEM: Valley fill: Sand, grayish-orange, fine to coarse, rounded chiefly frosted, quartz grains; some grayish orange clay Sand, grayish-orange, fine to coarse, rounded chiefly frosted quartz Sand, light-brown, fine to coarse, rounded; light-brown, frosted quartz Sand, light-brown, fine to very coarse, rounded; light-brown, fine to very coarse, rounded to subrounded; chiefly quartz Sand, light-brown, fine to very coarse, 90 percent rounded to angular quartz grains; less than 10 percent light-olive-gray limestone fragments Sand, grayish-orange, fine to very coarse, 30 percent subrounded to angular quartz; some medium to very coarse rock fragments; obsidian, and fossil fragments Sand, grayish-orange, fine to coarse with	d; i- 10 d; 20 10	D2010 10 30 40 50	
Lost circulation	d; i; i- 10 d; 20 10	10 30 40 50	
San Andres limestone: Lost circulation 12.10.26.322a Homestake-New Mexico Partr QUATERNARY SYSTEM: Valley fill: Sand, grayish-orange, fine to coarse, rounded chiefly frosted, quartz grains; some grayish orange clay Sand, grayish-orange, fine to coarse, rounded chiefly frosted quartz Sand, light-brown, fine to coarse, rounded; light-brown, frosted quartz Sand, light-brown, fine to very coarse, rounded to subrounded; chiefly quartz Sand, light-brown, fine to very coarse, 90 percent rounded to angular quartz grains; less than 10 percent light-olive-gray limestone fragments Sand, grayish-orange, fine to very coarse, 30 percent subrounded to angular quartz; some medium to very coarse rock fragments; obsidian, and fossil fragments Sand, grayish-orange, fine to coarse with granules, quartz 50 percent subrounded to angular quartz grains;	d; i; i- 10 d; 20 10	D2010 10 30 40 50	
San Andres limestone: Lost circulation 12.10.26.322a Homestake-New Mexico Partr QUATERNARY SYSTEM: Valley fill: Sand, grayish-orange, fine to coarse, rounded chiefly frosted, quartz grains; some grayish orange clay Sand, grayish-orange, fine to coarse, rounded chiefly frosted quartz Sand, light-brown, fine to coarse, rounded; light-brown, frosted quartz Sand, light-brown, fine to very coarse, rounded to subrounded; chiefly quartz Sand, light-brown, fine to very coarse, 90 percent rounded to angular quartz grains; less than 10 percent light-olive-gray limestone fragments Sand, grayish-orange, fine to very coarse, 30 percent subrounded to angular quartz; some medium to very coarse rock fragments; obsidian, and fossil fragments Sand, grayish-orange, fine to coarse with granules, quartz 50 percent subrounded to angular quartz grains; some fossils Sand, grayish-orange, fine to coarse with	d; i; i- 10 d; 20 10	10 30 40 50	
San Andres limestone: Lost circulation 12.10.26.322a Homestake-New Mexico Partr QUATERNARY SYSTEM: Valley fill: Sand, grayish-orange, fine to coarse, rounded chiefly frosted, quartz grains; some grayish orange clay Sand, grayish-orange, fine to coarse, rounded chiefly frosted quartz Sand, light-brown, fine to coarse, rounded; light-brown, frosted quartz Sand, light-brown, fine to very coarse, rounded to subrounded; chiefly quartz Sand, light-brown, fine to very coarse, 90 percent rounded to angular quartz grains; less than 10 percent light-olive-gray limestone fragments Sand, grayish-orange, fine to very coarse, 30 percent subrounded to angular quartz; some medium to very coarse rock fragments; obsidian, and fossil fragments Sand, grayish-orange, fine to coarse with granules, quartz 50 percent subrounded to angular quartz grains; some fossils Sand, grayish-orange, fine to coarse with granules, 60 percent rounded to angular,	d; i- 10 d; 20 10 d- 10	10 30 40 50	
San Andres limestone: Lost circulation 12.10.26.322a Homestake-New Mexico Partr QUATERNARY SYSTEM: Valley fill: Sand, grayish-orange, fine to coarse, rounded chiefly frosted, quartz grains; some grayish orange clay Sand, grayish-orange, fine to coarse, rounded chiefly frosted quartz Sand, light-brown, fine to coarse, rounded; light-brown, frosted quartz Sand, light-brown, fine to very coarse, rounded to subrounded; chiefly quartz Sand, light-brown, fine to very coarse, 90 percent rounded to angular quartz grains; less than 10 percent light-olive-gray limestone fragments Sand, grayish-orange, fine to very coarse, 30 percent subrounded to angular quartz; some medium to very coarse rock fragments; obsidian, and fossil fragments Sand, grayish-orange, fine to coarse with granules, quartz 50 percent subrounded to angular quartz grains; some fossils Sand, grayish-orange, fine to coarse with	d; i- 10 d; 20 10 d- 10	D2010 10 30 40 50 60	

TABLE 6 (continued)		
Stratigraphic unit and material	Thickness (feet)	Depth (feet)
12.10.26.322a Homestake-New Mexico Partners	(continued)	
QUATERNARY SYSTEM (continued)		
Valley fill (continued)		
Sand, grayish-orange-pink, fine to coarse w		
granules; 30 percent rounded to subangular		
frosted quartz grains; some subrounded she		
fragments		100
Sand, silty, grayish-red; sand is medium to		
very coarse with granules; 30 percent roun		110
to angular, frosted quartz	10	110
TRIASSIC SYSTEM:		
Chinle formation:		
Shale, sand, and gravel; 65 percent grayish		
red shale; 20 percent fine to coarse, roun to subangular quartz; 15 percent subrounde		
to angular gravel		120
Shale, sand, and gravel; 70 percent grayish		2.20
red shale; 15 percent medium to coarse,		
rounded to angular, frosted quartz; 15 per	_	
cent subrounded to angular gravel		140
Shale, sand, and gravel; 60 percent grayish	-	
red shale; 20 percent fine to medium, sub-		
rounded quartz, sand; 20 percent subrounde		
gravel		150
Shale, sandstone, and gravel; 60 percent gr		
ish-red shale; light-gray, very fine-grain sandstone with subrounded, frosted quartz	ea	
grains; 20 percent subrounded gravel	10	160
Sandstone shale and gravel: 50 percent	10	100
light-gray, very fine- to fine-grained san	d-	
stone with subrounded grains; 25 percent g		
ish-red shale; 25 percent subrounded grave		170
Shale and sandstone; 80 percent grayish-red		
shale; 20 percent very fine to fine and su	b-	
rounded frosted quartz grains		180
Shale and sand; 80 percent grayish-red shale		
20 percent very fine to fine, subrounded t		1222
angular sand		200
Shale and sand; 90 percent grayish-red shall	е;	
10 percent very fine, rounded to angular quartz sand grains	20	220
Shale, grayish-red		290
Shale, grayish-red; less than 5 percent fro		200
ed grains of very fine; subrounded, quartz		
sand		300
Shale and sandstone; 60 percent grayish-red		
shale; 40 percent light-gray, frosted quar		
very fine-grained sandstone with rounded to		
angular, frosted quartz grains	20	320

TABLE 6 (continued)		
Stratigraphic unit and material	(feet)	Depth (feet)
12.10.26.322a Homestake-New Mexico Partners (continued)	
TRIASSIC SYSTEM (continued)		
Chinle formation (continued)		
. Shale and sandstone; 80 percent grayish-red		
shale; 20 percent light-gray, very fine-		
grained sandstone with round to angular		
quartz grains		330
Shale, grayish-red	20	350
Shale and sandstone; 60 percent grayish-red		
shale; 40 percent light-gray, very fine-		
grained sandstone with rounded to angular,	20	270
frosted quartz grains	20	370
Shale and sandstone; 80 percent grayish-red		
shale; 20 percent light-gray, very fine- grained quartz sandstone	40	410
Shale and sandstone; 80 percent grayish-red	40	110
shale: 20 percent light-gray, very fine-		
grained sandstone in lenses 2 mm wide bande	d	
with shale		430
Shale, grayish-red		440
Shale and limestone; 80 percent grayish-red		
shale; 20 percent light-brownish-gray; medi	un-	
grained crystalline limestone	40	480
Shale, grayish-red	10	490
Shale and limestone; 90 percent grayish-red		
shale; 10 percent light-brownish-gray lime-	E-G	2-2-2
stone		500
Shale, pale-red to grayish-red	20	520
Shale and limestone; 90 percent pale-red to		
grayish-red shale; 10 percent very light-gr		530
medium-grained crystalline limestone Shale, limestone, and sandstone; 70 percent	10	030
pale-red to grayish-red shale; 20 percent		
very light-gray, medium-grained crystalline		
limestone; 10 percent white, fine-grained		
sandstone	20	550
Shale and limestone; 90 percent grayish-red		
shale; 10 percent light-gray, medium-graine	d,	
crystalline limestone	10	560
Shale, grayish-red	10	570
Shale and sandstone; 90 percent grayish-red		
shale; 10 percent pale-greenish-yellow, ver		
fine-grained sandstone	10	580
Shale, sandstone, and limestone; 80 percent		
grayish-red shale; 10 percent pale-greenish		
yellow, very fine-grained sandstone; 10 percent light-gray limestone		590
Shale, limestone, and sandstone; 60 percent	10	000
grayish-red shale; 20 percent light-gray		
limestone; 20 percent light-greenish-yellow	1	
very fine sandstone		600
	Re ====================================	

TABLE 6 (continued)		
	Thickness	Depth
Stratigraphic unit and material	(feet)	(feet)
Stratigraphic unit and material	- (2000)	(2000)
12.10.26.322a Homestake-New Mexico Partners	(continued)
TRIASSIC SYSTEM (continued)		
Chinle formation (continued)		
Shale and limestone; 80 percent grayish-red		
shale; 20 percent light-gray limestone		610
		630
Shale, grayish red		660
Shale, grayish-red; micaceous		000
Shale and sandstone; 80 percent grayish-red		
shale; 20 percent light-greenish-yellow,	10	670
sandstone, very fine grained		670
Shale, grayish-red		680
Shale and sandstone; 90 percent pale-red sh	are;	
10 percent light-brownish-red very fine-		
grained sandstone with calcium carbonate	1.0	200
cement		690
Shale, pale-red	20	710
Shale and sandstone; 90 percent light-gray	2	
shale; 10 percent light-gray sandstone wit		12-52-52
calcium carbonate cement		720 -
Shale, light-gray	30	750
Shale and sandstone; 70 percent pale-red		
shale; 30 percent light-gray, very fine-		
grained sandstone	10	760
Shale, pale-red; sandstone and limestone le	SS	
than 5 percent	30	790
Shale and silty limestone, 60 percent pale-		
brown shale; 40 percent light-gray to medi	um-	
gray grading to moderate-red, silty limest	one	
with mixed texture	10	800
PERMIAN SYSTEM:		
San Andres limestone:		
Sandstone, shale, and limestone; 70 percent		
very pale-orange to moderate-red, fine-to		
very coarse-grained and granule sandstone		
with subrounded to angular grains; 15 per-		
cent grayish-red shale; 15 percent light-g		
to medium-gray and moderate-red limestone	10	810
Sandstone and limestone; 80 percent light-g		
to moderate-red, very fine-to medium-grain		
sandstone with subrounded to angular grain		
light-gray to medium-gray, medium-grained		
crystalline limestone	10	820
Sandstone and limestone; 90 percent moderat		
red, very fine-to medium-grained sandstone		
with subrounded to subangular grains and c	a1-	
cium carbonate cement; 10 percent light-gr		
to medium-gray, medium-grained crystalline		
limestone		830
THE STORE THE PROPERTY OF THE		

TABLE 6 (continued)		
Stratigraphic unit and material	Thickness (feet)	Depth (feet)
12.10.26.322a Homestake-New Mexico Partners	(continued)	
PERMIAN SYSTEM (continued)		
San Andres limestone (continued)		
Sandstone and limestone; 95 percent yellowi		
orange to moderate-red, fine-to medium-gra		
sandstone with subrounded to angular grain		
and calcium carbonate cement; 5 percent li gray to moderate-gray, medium-grained crys		
line limestone		840
Sandstone, moderate-red, fine-to medium-	10	010
grained, subrounded to angular with calciu	m	
carbonate cement		850
Sand, pale-yellowish-brown, very fine to co		
and granular, rounded to angular; 85 perce		
frosted quartz		870
12.10.27.431 W. A. Murray		
QUATERNARY SYSTEM:		
QUATERNARY SYSTEM: Valley fill:		
Sandstone, grayish-orange, fine- to very co	arce	
grained, rounded to subrounded, frosted qu		
70 percent, very friable		10
Sandstone, grayish-orange, fine- to very co		
grained, rounded to subrounded; frosted qu		
70 percent; subangular fragment of moderat		
red vesicular lava 1 mm across; very friab	le . 10	20
Same as above, except without lava fragment	s 20	40
Sand, grayish-orange, fine to coarse, round	ed	
to angular; frosted quartz 60 percent	20	60
Sand, grayish-orange, very fine to medium,		
rounded to subangular; frosted quartz 60 p		
cent	30	90
TRIASSIC SYSTEM:		
Chinle formation:		
Shale and sand; 80 percent grayish-red shale		
20 percent grayish-orange fine to coarse,		
rounded to angular grains of frosted quart		
sand		100
Shale, limestone, and sand; 90 percent gray		
red shale; 5 percent light-gray limestone;	5	
percent fine to coarse, subrounded to sub-	20	100
angular frosted quartz sand		120
Shale, sandstone, limestone, and sand; 80 pe		
cent grayish-purple shale; 10 percent ligh gray to light-brownish-gray, very fine-gra		
subrounded sandstone; 5 percent light-medi		
gray limestone; 5 percent fine to medium,		
rounded, frosted quartz sand		150
and the state of t		200